Testimony of Dr. Howard A. Zucker, M.D., J.D.,
Commissioner of the New York State Department of Health

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On Drinking Water Contamination

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Good morning, Senators Hannon, O'Mara, Marchione, Little, Valesky, and Hoylman and others joining us here today. I am pleased to be here to discuss our experiences with unregulated contaminants in our drinking water. I'm joined by Brad Hutton, Deputy Commissioner of the Office of Public Health, who has been with the Department of Health for more than two decades and Dr. Lloyd Wilson, a 34-year veteran of water issues at the Department of Health. Also present with us today are Dr. Nathan Graber, Dr. Elizabeth Lewis-Michl and Dr. Roger Sokol from the Department's Center for Environmental Health.

I'm proud to be joined by these dedicated public servants who have made a career of working to protect public health.

Our drinking water comes from natural sources, and each source can contain naturally occurring minerals, organic materials, chemicals and contaminants. In fact, all drinking water -- even bottled water -- may have small amounts of contaminants. Let me give you an example: earlier this year, we conducted tests on ten different brands of bottled water. We found small amounts of barium, isobutene, and disinfection byproducts. Many people may not know it, but these contaminants are allowable in our drinking water—even bottled water— up to a certain level.

Our country's economic success has resulted from our industrial sector. Industries across the country and right here in New York have manufactured everything from carpets to non-stick frying pans – all while employing hundreds of thousands of people. All of this grew our economy and supported our families; but it has also left a legacy of pollution in our communities that we've yet to fully understand.

There are more than 80,000 contaminants as a result of our industrial progress – and our ability to measure these contaminants has increased greatly in recent years. We can now detect contaminants in drinking water at extremely low levels that we may not have detected at all in years past. Not that long ago, our ability to measure chemicals was in the range of parts per million to parts per billion. Today, we can detect the presence of chemicals in water in parts per trillion (that's with a T). That's the equivalent of locating one red marble in a jar of one trillion marbles that are otherwise orange. As a result, scientists now know that at least 42 states have one or more of 141 unregulated contaminants in their drinking water – and that number is growing.

However, states have been grappling with how to manage these emerging unregulated contaminants from our industrial past in the face of shifting federal *guidance* or the absence of any *regulation* from the federal government, which I will fully describe momentarily. In Hoosick Falls, the EPA also offered changing, conflicting guidance and recommendations that exacerbated the situation in Hoosick Falls by confusing state and local officials, village residents, and other members of the community. That's why today, we're calling on the EPA to reimburse the State for any costs that the State is not able to recoup from the polluters. Those costs already exceed $25 million and we expect that figure to grow well beyond $75 million in the coming years.

Under the federal Safe Drinking Water Act, the U.S. Environmental Protection Agency (EPA) oversees all of the nation's 155,000 public water systems. Following those EPA standards, the

Department of Health works with local municipalities and regulates all 9,000 public drinking water systems in our state. Federal standards provide clear rules and regulations that must be followed if public drinking water systems exceed the *allowable* amount of a regulated contaminant, such as benzene, arsenic, and cadmium. This is not uncommon. On average, my Department handles more than 200 cases annually where water systems exceed the allowable level of a federally-regulated contaminant. The federal government has established specific regulatory standards for fewer than 100 contaminants.

In addition to that very small group of regulated contaminants, there are more than 80,000 unregulated contaminants, like PFOA. For some of these, EPA has issued health advisories. EPA's health advisories provide information on contaminants that may appear in drinking water. These advisories provide guidance to state and local entities. The EPA first learned about PFOA concerns in 2001 but didn't begin phasing out the use of PFOA in manufacturing until 2006. And they waited until 2009 to set an advisory level – not a regulation.

The EPA set the PFOA advisory level in drinking water at 400 parts per trillion and said if that is exceeded, "action should be taken to reduce exposure to unregulated contaminants in drinking water." In other words, the health advisory level is the point at which drinking water systems should begin taking steps to reduce the amount of the contaminant in the water supply. The advisory says nothing about taking the water system offline or offering an alternative water source while those steps to reduce the exposure in the water supply are undertaken.

According to the EPA, their health advisories are intentionally set below levels that are expected to result in health effects. This is a buffer, known scientifically as the margin of protection because the level at which health effects may occur is *much higher* than the level at which the health advisory is set.

In addition, the EPA does not require all small public water systems – defined as serving less than 10,000 people – to test for any of the more than 80,000 unregulated contaminants. That's why the possibility of PFOA contamination was raised not by the Village -- which has less than 10,000 people – but by a local Hoosick Falls resident.

Upon becoming aware of the possible detection of PFOA in Hoosick Falls, the Department of Health immediately mobilized to support the Village and the County as they worked to confirm the potential contamination through their own testing. Dr. Lloyd Wilson, with me here, has been tirelessly working on this issue from the first day in 2014 through today. The Department followed the EPA health advisory guidance throughout the process and worked with the local municipality to test and reduce the exposure in the village water system.

In line with the 2009 EPA advisory, our efforts helped the Village confirm, in November 2014, that some PFOA levels in the municipal water supply exceeded EPA guidance levels and establish a plan of attack for removing the contaminant from the water supply.

In December 2014 we sent EPA Region 2 the Village's PFOA test results, and we kept EPA informed as we moved forward, including a July 2015 meeting with regional staff and continued discussions between our agencies.

From the beginning, our local partners kept residents informed about the contamination and the progress being made to address it. The Village provided three detailed update letters to residents in December 2014, April 2015 and then again in August 2015. The Village Board meeting minutes show that this issue was discussed numerous times throughout this time period and staff from my Department participated in the Water Advisory Board meetings, met and/or spoke directly with Village representatives on multiple occasions.

Using the EPA's 2009 health advisory guidance, which, as I said, states that in case of an exceedance, "action should be taken to reduce exposure to unregulated contaminants in drinking water," my Department's main priority was to work closely with the Village to evaluate the various treatment options that would remove the PFOA from the water supply. Initially, the hypothesis and the hope was that the source was a faulty system component within the municipal filtration system that could be identified and fixed in short order.

After receiving the confirmatory testing results in late 2014, we worked with the Village in January 2015 to develop a protocol for future sampling, engage a second laboratory to confirm sampling results, discuss treatment methods for the Village water supply, and participate in the Village's Water Advisory Committee, which brought together village, town, county, state, and federal officials and representatives to work together on solving the problem.

Throughout the spring of 2015, we were providing the Village with technical assistance and engineering expertise to help identify and assess feasible filtration methods, including reverse osmosis, chemical oxidation, powdered carbon, and granulated activated carbon. Local elected officials were kept apprised of our progress and the plan of action, along with representatives for federal, state, and local officials, including Congressman Gibson and Assemblyman McLaughlin.

By May 2015, under the Department of Health's guidance, the Village embarked upon and completed the pilot testing of a new filtration system and confirmed that granulated activated carbon (GAC) filtration would be effective for removing PFOA in Hoosick Falls.

In June 2015, while continuing to pursue the GAC system for the public water supply, my Department took the initiative, in coordination with the Village and Town, to conduct sampling and testing of private wells and the school.

It is important to note that PFOA testing is complex because it's an emerging contaminant and at the time there were only 13 labs in North America that were able to conduct it. The private well testing was conducted after confirming that our state public health lab, Wadsworth Center, had the capacity and the authority to do PFOA testing in a manner consistent with EPA guidance.

Why did we want to conduct our own testing in early summer of 2015? Three reasons:

- First, to assess the extent of the contamination and begin mapping the potential sources
- Second, to determine whether private wells were affected (the Village only tested public wells)

- And finally, to pursue evidence to demonstrate Saint Gobain's role as the responsible party to force them to pay for the GAC filter.

My Department's concern for private wells in the Village and the Town stemmed from the investigation into the source of the contamination. As it became more likely that the PFOA was in the groundwater as opposed to components of the water system itself, we realized that this could extend beyond the public water system.

We started with the private wells that had the greatest potential for contamination. The sampling plan was designed to cover a wide area in order to determine the boundaries of the contamination. As the presence of PFOA at any level was confirmed in the tested private wells, we continued to expand this area.

By October 2015, armed with sampling results showing that the pollution had contaminated groundwater and demonstrating that Saint Gobain was the likely responsible party, we worked with the Village to secure a commitment from Saint Gobain to fund the granulated activated carbon filter to remove the PFOA from the water supply, as well as provide residents with bottled water as an additional measure while the system was being installed. The granulated activated carbon filtration system was installed, tested, and delivering water to residents with PFOA at non-detectable levels by March 2016. Unlike other communities in the country that have had GAC systems installed, my Department tests the system twice a month and the only acceptable level is non-detect.

Although we followed the guidance for an exceedance of an unregulated contaminant like PFOA, and although the EPA had been informed and updated about our efforts starting in December 2014, the EPA's Region 2 office suddenly shifted policy in December of 2015 and then again in 2016. These actions by the EPA were inconsistent and created confusion, anxiety and uncertainty.

First, in December 2015, a full year after being informed of the situation in Hoosick Falls, EPA Region 2 issued a "do not drink" recommendation for water in Hoosick Falls. This was not a directive from EPA headquarters – which had an existing health advisory for PFOA with no mention of "do not drink" in the case of an exceedance – it was a directive from EPA Region 2 and the recommendation only applied to Hoosick Falls. From what we understand, that was the first time the EPA ever issued a "do not drink" recommendation to a local water system dealing with an unregulated contaminant like PFOA. Less than 24 hours later, my Department issued a recommendation consistent with the EPA.

Then, in January 2016, more than a year after being informed of the situation in Hoosick Falls, and after Saint Gobain agreed to pay for the GAC system, the EPA Region 2 Administrator suddenly lowered the PFOA advisory from 400 parts per trillion to 100 parts per trillion for drinking, cooking or long baths. Although the EPA Region 2 100 parts per trillion advisory only applied to private wells in the Town of Hoosick and the Village of Hoosick Falls, we made it a statewide application since it didn't make sense to apply the lower standard to only one community or one type of water system. This was particularly important because PFOA was

detected in the neighboring Town of Petersburgh water system – which would have had a different EPA advisory had we not applied the 100 parts per trillion advisory statewide.

The fact that there were now inconsistent and conflicting PFOA advisories from the EPA resulted in a bi-partisan call from three Governors – Governor Cuomo and the Governors of New Hampshire and Vermont – in a letter to EPA Administrator Gina McCarthy advocating for uniform federal guidelines and a consistent science-based approach to all unregulated contaminants, including PFOA.

In May 2016, in response to the letter from the three Governors, EPA finally established a lifetime health advisory for PFOA of 70 parts per trillion, which outlines three steps for instances where there is an exceedance: step 1 – assess the contamination; step 2—inform consumers; and step 3 – reduce exposure in the water supply. The EPA's May 2016 health advisory – consistent with their 2009 health advisory – does not make any recommendation that residents should not drink the water in the case of a PFOA exceedance. It advises the three clear actions I just mentioned – assess, inform, and take steps to reduce exposure in the water supply – and all of those actions were taken immediately upon the Department being made aware of the possible contamination.

Moreover, still, as of today, EPA has left PFOA as an unregulated contaminant rather than setting a binding, enforceable drinking water standard like they have in 100 other cases.

The EPA has been studying and monitoring PFOA for over 15 years. Nevertheless, as I said, the Agency has chosen not to regulate PFOA in drinking water – forcing us to adapt to confusing, changing, and inconsistent guidance and marshal significant state resources to do so.

We are committed to using this experience to identify opportunities to strengthen the way federal, state, and local institutions address the emerging challenge of water quality, particularly emerging, unregulated contaminants, which, with more than 80,000 of them, is going to be one of the defining issues of our time.

Recognizing this as a growing national issue, Governor Cuomo established in February the Water Quality Rapid Response Team, charged with quickly identifying and addressing critical drinking water contamination concerns across the State. I co-chair this effort with Commissioner Seggos and over the past several months our teams have been working together to:

1) rapidly respond to site-specific issues; and

2) develop an Action Plan that will include recommendations to enhance the State's existing drinking water, groundwater, and surface water protection programs.

One example of the team's work in its first few months is our identification of -- and swift response to – *PFOS* contamination in the City of Newburgh's public water supply. Shortly after the Governor launched the Rapid Response Team, my staff analyzed existing sources of data, including the sampling results reported directly to the EPA by the local municipality through the Unregulated Contaminant Monitoring Rule (or UCMR) program. Although all samples were

below the EPA's provisional health advisory in place until recently, the State immediately engaged the City to take steps to reduce exposure.

Working together, Governor Cuomo and you in the Legislature, have made New York a national leader with the largest annual investment in water infrastructure, a historic commitment to the state Environmental Protection Fund, and a $1 billion state Superfund Program.

I hope this testimony has been useful in providing clarity on how water is regulated, how the Department of Health proactively worked to fix the challenge in Hoosick Falls, and how the State is using the experience to ensure we are doing everything in our power to stay ahead of this emerging national challenge. Thank you.

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